installation for controlling and power cycling network devices such as routers. Applicant does not attempt to claim all remotely activated power devices, but instead the particular combinations provided in the claims that make the invention a solution in providing power cycling for networking devices, in particular because the invention allows control of a power cycling device through a standard network cable, including a cable carrying data signals.

Response to Rejection

The claims, as amended, are not anticipated or rendered obvious by controllable power supplies (such as discussed in the EMM reference) that teach a separate control cable is are needed to control the power supply. The claims, as amended, also are not anticipated or rendered obvious by power supplies (such as shown in Lord) that teach that a telephone connection is needed to control the power supply, including in some cases the need for a modem to be continually powered on in order to detect codes or ringing on a telephone connection. The claims, as amended, also are not anticipated or rendered obvious by power supplies (such as shown in Pulizzi) that teach that data commands must enter the power supply and be processed by a microcontroller in order to control the operation of power outlets.

In fact, these references, teach away from the concept of the present invention that allows control of a network device not requiring any separate control connections or control cabling beyond using control wires in network cabling that is already present to connect the networking device.

Cheng U.S. 5644174

The patent discuss a power sequencer, with further provisions for daisy chaining. CONTROL IN is described as a separately generated control signal that can also be used for daisy chaining. There is no illustration or discussion whatsoever anywhere in the reference of a network provided signal or standard network port being used for controlling operation. There is no discussion or illustration whatsoever in Cheng II of the limitations **"a first network socket located on a first of said distinguishable surfaces; wherein said first socket is able to receive a standard network cable connector and able to receive a control signal transmitted over a wire of a network cable;"** provided in claim 1 or the limitation **"wherein a network signal cable can be used to carry a control signal without generating unacceptable interference on said network cable;"** of claim 13 or the limitations **"a first network socket located on a first surface, said first**

socket connectable to a standard network cable; a second network socket located on said first surface, said second socket connectable to a standard network cable; a power supply socket located on a second surface; and control circuitry within said housing operatively connected with said first socket and said power supply socket wherein power to said power supply socket may be turned on or off in response to a control signal received over one wire of a standard network cable at said first socket while not interfering with network communication signals on different wires flowing between said first socket and said second socket." of claim 14. While Cheng does appear to discuss a control input socket 204, nothing in Cheng suggests that such a socket is a standard network socket or is capable of carrying standard network data signals that are not interfered with by the control signals carried on the same cable. Thus each of the independent claims contain limitations not taught or discussed by Cheng.

EMM 96

Furthermore, none of the previously cited limitations are shown in any of the devices outlined in the EEM 1996 Pulizzi Engineering Inc. manual relied by the Examiner. While this manual does seem to discuss rack mounted power supplies, the manual does not teach any of the above limitations. **Therefore, Cheng and the EEM 96 catalog together do not even show all of the limitations of Applicant's claimed invention. Applicant therefore respectfully requests that the Examiner's rejection of all claims based on this combination be withdrawn.**

Because the catalog relied on by the Examiner did not specify in detail operation of the devices mentioned, Applicant has located additional information about these power supplies referenced by their model number and has submitted this additional information with the attached IDS. This additional information demonstrated that none of the cited power supplies use a standard network signal or network connection to control ON/OFF operation. These supplies, instead, require a separate signal to be run to the supplies from a computing device, especially for the purpose of remote operation. In some designs, this control signal, can be passed through the power supply to another power supply only to provide for a number of power supplies to be controlled by the same control signal in a daisy-chain or parallel fashion.

The present invention, in contrast, does not requires a separate control signal or cable to be run to the power supply control mechanism. Instead, the invention allows a standard network cable,

using standard network connections and commands to be plugged into the power supply in order to control remote operation.

Pulizzi U.S. 5923103

In earlier responses, Applicant presented arguments traversing the combinations cited by the Examiner and did not admit that any rejections made by the Examiner were proper. The patent appears to be related to the Pulizzi Engineering products that the Examiner also cited and that have been addressed by the Applicant. The patent discusses a switched-output controller apparatus with repeater function that includes a microcontroller 18 that can communicate with remote control signals through various sockets e.g. 142, 144, 160, 162.

As shown in the figure and discussed in the patent, all eight relays 60-74 are controlled by signals from the microcontroller 18 through a relay driver 24. The patent suggests that there is a command protocol for instructing microcontroller 18 in how to schedule switch operation of the outlets 40-54 through the relays. As shown in the figure and discussed in the patent, there is no direct operative connection between a signal line in any of sockets 142, 144, 160, 162 and the relays.

The patent discusses at length that communication to the relays is through an RJ232 connection that allows microcontroller 18 to receive signals FROM A MODEM. (See Col. 2: Lines 46-50 and Col. 8: Lines 34-58.)

The patent also discusses at length that if it is desired to control devices located at different locations, an RS485 or RS482 type network connection is made using a different set of RS11 connectors. RS422 and RS485 interfacing is known in the art as using a twisted-pair wire (i.e. 2 wires) for each signal (for example see www.kksystems.com/serdesc1.html). The main difference between RS422 and RS485 is as follows: RS422 has no tri-state capability (its driver is always enabled) and it is therefore usable only in point-to-point communications (although an RS422 device can act as a Master on a 4-wire RS485 system). RS485 has tri-state capability and can therefore be used in multidrop systems. RS422 is full-duplex, i.e. data can flow in both directions simultaneously - and often does. RS422 uses two separate twisted pairs. RS422 is often used simply for extending RS-232 cables. RS485 is half-duplex. It exists in two varieties: 2-wire (which uses a single twisted pair) and 4-wire (which uses two twisted pairs like RS422). RS485 systems are usually "Master/Slave"; each Slave device has a unique address and it responds only to a correctly addressed

message (a "poll") from the Master. A Slave never initiates a dialogue. In a 2-wire system, all devices (including the Master) must have tri-state capability. In fact, it appears that a major advance claimed by Pulizzi is the need for, and presence of, TWO ENTIRELY DIFFERENT AND SEPARATE NETWORK CONNECTIONS for the device to operate (See Abstract, 2d to last sentence and elsewhere throughout.) In particular, Pulizzi discusses that prior systems had just RS232 networks, which were limited to 200 foot operation (Col. 2: line 45 to Col. 3, line 63) and a major advance taught in the patent is use of two separate "in parallel" networks.

Thus, there is no discussion or illustration in Pulizzi of the limitations **"a first network socket located on a first of said distinguishable surfaces; wherein said first socket is able to receive a standard network cable connector and able to receive a control signal transmitted over a wire of a network cable; said network cable also carrying network communication signals over separate data wires; "** provided in claim 1. Pulizzi instead teaches away from the invention in that Pulizzi discusses that to control an outlet, communication must first be made to a microcontroller 18 through a modem connection vi RJ11 connectors. This does not teach or suggest a standard network connection that also carries data. Further Pulizzi discusses that communication with additional controlled outlets must be accomplished through an entirely separate master/slave device type communication through an RS232 or RS485 or RS422 type connection, with a further limitation that the devices cannot be more that 4,000 feet apart.

Further, Pulizzi does not teach or suggest the limitations "**wherein a network signal cable can be used to carry a control signal without generating unacceptable interference on said network cable comprising: placing a network socket on one surface of said housing, said network socket able to receive signals from a plurality of separate wires in a multiple wire network cable; "** of claim 13. As discussed above, Pulizzi teaches away in that it describes using a modem connection for connecting to the outside world and using a separate, master/slave device-type RS232 etc. type connection that does not otherwise carry any network data. Likewise, Pulizzi does not teach or suggest the limitations **"a first network socket located on a first surface, said first socket connectable to a standard network cable; a second network socket located on said first surface, said second socket connectable to a standard network cable; a power supply socket located on a second surface; and control circuitry within said housing operatively**

connected with said first socket and said power supply socket wherein power to said power supply socket may be turned on or off in response to a control signal received over one wire of a standard network cable at said first socket while not interfering with network communication signals on different wires flowing between said first socket and said second socket." of claim 14. Thus each of the independent claims contain limitations not taught or discussed by Pulizzi.

Furthermore, as discussed above, none of the previously cited limitations are shown in any of the devices outlined in the EEM 1996 catalog relied by the Examiner nor in the Cheng reference. **Therefore, neither the combination of Pulizzi and Cheng nor the combination of Pulizzi and the EEM 96 catalog show all of the limitations of Applicant's claimed invention. Applicant therefore respectfully requests that the Examiner's rejection based on these combinations be withdrawn.**

Response to Obviousness Rejection

Furthermore, the Examiner has cited combinations of references to allege obviousness under 35 U.S.C. 103(a). However, as discussed above, the various device cited by the Examiner operate in different ways from one another and from the present invention. The Examiner has not alleged that there is a suggestion and motivation to combine the cited publications NOR has the Examiner pointing out where the cited art discloses such suggestion or motivation.

Citing references which merely indicate that isolated elements and/or features recited in the claims are known is not a sufficient basis for concluding that the combination of claimed elements would have been obvious. Ex parte Hiyamizu 10 USPQ2d 1393 (PBAI 1988). Such combination of known elements is not obvious absent evidence of a motivating force which would impel persons skilled in the art to do what Applicant has done. Ex parte Levengood 28 USPQ2d 1300 (BPAI 1993). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. In re Geiger 2 USPQ2d 1276 (CAFC 1987); In re Fine 5 USPQ2d 1596 (CAFC 1988). The mere fact that references can be combined does not render the resultant combination obvious unless *the prior art* also suggests the desirability of the combination. In re Fritch 23 USPQ2d 1780 (CAFC 1992).

Even had the Examiner indicated references that show the elements of the claimed invention (which Applicant does not concede) and that could be meaningful combined, the Examiner further has the burden to identify evidence of motivation in the cited art to make Applicant's invention. The Examiner has failed to identify such evidence of motivation in the cited art. The Examiner is respectfully reminded that it is the Examiner's her burden to provide such evidence in the cited art. In re Jones 21 USPQ2d 1941, 1944 (CAFC 1992). In the absence of the Examiner clearly identifying such a suggestion and factual foundation *in the cited art* for (1) the combination of the cited art, and (2) a reasonable expectation of success that the combination would function correctly, Applicants respectfully submit that the Examiner has failed to make out a prima facie allegation of obviousness under 35 U.S.C. 103.

Applicant has therefore addressed the Examiner's earlier rejections under 35 U.S.C. §103. In view of the foregoing, Applicant believes all claims now pending in this application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If a telephone conference would expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (510) 337-~~7855~~ 7871.

Dated: May 16, 2001

Respectfully submitted,

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APPENDIX A

"Marked up" claims illustrating the amendments made to the claims of 09/379411 with entry of this amendment, with added text underlined and deleted text struck through. The "|" mark outside the left margin indicates lines with text changes.

1. A controllable power supply for remotely controlling communication equipment comprising:

a housing having at least two distinguishable surfaces;

a first network socket located on a first of said distinguishable surfaces;

wherein said first socket is able to receive a standard network cable connector and able to receive a control signal transmitted over a wire of a network cable;

said network cable also carrying network communication signals over separate data wires;

a power supply socket located on a second of said distinguishable surfaces;

control circuitry within said housing operatively connected with said first socket, and said power supply socket wherein power to said power supply socket may be turned on or off in response to ~~a~~ said control signal received at said first socket.

2. The device according to claim 1, further comprising:

a power line for connecting to an external power source.

3. The device according to claim 1, further comprising:

a second network socket wherein a network signal can pass over separate data wires from said control signal between said first socket and said second socket and have adequate required clearance without experiencing interference by said control circuitry and components of said power supply.

4. The device according to claim 1, further comprising:

an indicator light operatively connected to said control circuitry for indicating whether power to said power supply socket is turned on or off.

5. The device according to claim 1, wherein said control circuitry comprises a control relay.

6. The device according to claim 1 wherein said first and second distinguishable surfaces are parallel to each other.

7. The device according to claim 1 wherein said housing constitutes a box comprising six surfaces.

8. The device according to claim 7 wherein said housing comprises a top surface, a bottom surface, a front surface, a rear surface, a left surface, and a right surface.

9. The device according to claim 8, wherein said first network socket is located on said front surface and said power supply socket is located on said rear surface.

10. The device according to claim 8, further comprising:

one or more additional pairs of network sockets located on said front surface, each pair receiving a control signal for a set of ~~associated with~~ one or more power supply sockets located on said rear surface.

11. The device according to claim 9, wherein said top surface and said bottom surface are parallel planes between 1.5 and 2.0 inches apart.

12. The device according to claim 9, wherein said housing is mountable in a computer device rack and occupies only one rack unit.

13. A method of constructing a controllable power supply wherein sockets and control circuitry may be contained within a housing having a constrained height and wherein a network ~~signal~~ cable can be used to carry a control signal without generating unacceptable interference on said network cable comprising:

placing a network socket on one surface of said housing, said network socket able to receive signals from a plurality of separate wires in a multiple wire network cable;

placing a power supply outlet on an opposite surface of said housing; and

placing control circuitry within said housing, said control circuitry operatively connected with said network socket and said power supply socket wherein power to said power supply socket

may be turned on or off in response to a control signal received over a ~~at said~~ control signal wire of a network cable, said control signal wire separate from data carrying wires~~socket~~.

14. A network device controllable power supply comprising:

a housing having at least two surfaces;

a first network socket located on a first surface, said first socket connectable to a standard network cable;

a second network socket located on said first surface, said second socket connectable to a standard network cable;

a power supply socket located on a second surface; and

control circuitry within said housing operatively connected with said first socket and said power supply socket wherein power to said power supply socket may be turned on or off in response to a control signal received over one wire of a standard network cable at said first socket while not interfering with network communication signals on different wires flowing between said first socket and said second socket.

15. The device according to claim 14 further comprising:

wherein said first and second network sockets are one pair of a plurality of paired network sockets on one surface, each pair associated with at least one controlled power supply socket on another surface and each pair passing between the pair networking communication signals; and

further wherein for each pair, on one of said pair, a control signal can be received, controlling said at least one power supply socket associated with said pair.

16. The device according to claim 14 wherein a network device is made controllable by:

attaching a network cable intended for said network device to a first network socket of a pair of network sockets;

attaching said network device to a second network socket of a pair of network sockets; and

connecting a power input of said network device to a power socket associated with said pair.

17. The device according to claim 14 wherein said control circuitry comprises a control relay.

18. The device according to claim 14 wherein said first and second distinguishable surfaces are parallel to each other.

19. The device according to claim 14 wherein said housing constitutes a box comprising six surfaces.

20. The device according to claim 18 wherein said top surface and said bottom surface are parallel planes between 1.5 and 2.0 inches apart.

21. The device according to claim 14 wherein said housing is mountable in a computer device rack occupying only one rack unit.